

REMARKS

Summary of Claim Status

Claims 1-9 and 19-26 are pending in the present application. Claims 1-6, 8, 9 and 19-26 are rejected for the reasons discussed below. Claim 7 is objected to as depending from a rejected base claim, but indicated as allowable if properly rewritten in independent form.

Applicant requests the favorable reconsideration of the claims and withdrawal of the pending rejections and objections, in light of the following discussion.

Rejections Under 35 U.S.C. § 102

Claims 1-6, 8 and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Honda et al., U.S. Patent No. 5,497,109 ("Honda"). With respect to Claim 1, the Examiner states: "Honda et al. (USPN 5,497,109) teaches a method of measuring signal skew of a signal tree on a programmable device." Applicant respectfully disagrees and traverses the rejection with regard to all claims.

Claim 1

Applicant respectfully submits that the Office Action does not even allege, much less prove, that Honda discloses the claimed steps of "instantiating a first delay element on the [programmable logic] device using a first programming sequence" and "instantiating a second delay element on the [programmable logic] device using a second programming sequence." In fact, as pointed out in Applicant's previous response, Honda does not teach or disclose a programmable logic device at all, and therefore cannot possibly teach either of these two steps.

As is well known in the art, a programmable logic device is a type of integrated circuit that can be programmed by a user to perform specified functions. (See, e.g., paragraph [0002] of the specification). Typically, a programmable logic device may be configured to perform a function by instantiating elements corresponding to the desired function. Nowhere in Honda is any

such programmable logic device disclosed or even suggested, and consequently no instantiating step is disclosed or suggested in Honda. Honda does not even mention, much less teach, a programmable logic device, instantiating on a programmable logic device, and using a programming sequence, all as claimed by Applicant.

Furthermore, the Examiner has cited Col. 1, lines 21-29 and Figure 1 of Honda in alleging anticipation of Claim 1. Applicant, however, respectfully submits that the step of connecting the output terminal of the first logic block to the input terminal of the second logic block, and the step of connecting the output terminal of the third logic block to the input terminal of the second logic block are not disclosed or taught by Honda. The Examiner has not identified any elements in Honda corresponding to the first, second, and third logic blocks claimed by Applicant, and Applicant submits that no such correspondence can be made. Moreover, the cited portions of Honda do not disclose any connecting among the inputs and outputs of any logic blocks, as claimed by Applicant. If the rejection is to be maintained, Applicant respectfully requests clarification of how Honda is being read. Otherwise, Applicant requests that the rejection be withdrawn.

Finally, as noted in Applicant's previous response, Honda merely teaches a method for reducing clock skew. In contrast, Applicant presents a method for measuring signal skew. Honda does not teach or disclose any methods for measuring skew, and therefore does not anticipate the present invention.

Applicant does not dispute that a claim must be given the broadest reasonable interpretation consistent with the specification, and in fact agrees that claims must be interpreted as broadly as their terms reasonably allow. However, the present Office Action fails to point out any teaching in Honda of a programmable logic device and the steps of instantiating first and second delay elements using first and second programming sequences. Furthermore, Honda does not teach the steps of connecting the output terminal of the first logic

block to the input terminal of the second block and connecting the output terminal of the third logic block to the input terminal of the second logic block. Applicant does not rely on the preamble to the claim, but instead relies on the plain meaning of the language used in the elements of the claim. Applicant believes that in light of the broadest possible reading of the present claims, Honda does not anticipate any claim for the reasons presented above.

Therefore, Applicant believes that Claim 1 is allowable over the present rejection and respectfully requests the Examiner's reconsideration and withdrawal thereof.

Claims 2-6, 8 and 9

Each of Claims 2-6, 8 and 9 depends, either directly or indirectly, from Claim 1, and thus includes all of the limitations of Claim 1. Therefore, for at least the reasons presented above with respect to Claim 1, Applicant believes Claims 2-6, 8 and 9 are also allowable and respectfully requests allowance of such claims.

Claims 19-26

Claims 19-26 are rejected under 35 U.S.C. § 102(e) as being anticipated by Wang et al., U.S. Patent No. 6,617,884 ("Wang"). Applicant respectfully traverses this rejection.

The Examiner cites Col. 7, lines 1-5 and Figures 2 and 3 of Wang in alleging anticipation of Claim 19. The cited portion, however, fails to teach the invention as claimed. In particular, Wang does not disclose or even suggest first and second oscillators. The cited portion of Wang merely describes a ring oscillator to implement a delay cell. The cited figures in Wang do not appear to illustrate any oscillators of any kind. Moreover, the circuit disclosed in Wang provides a phase frequency detector for indicating a phase difference between two clock signals (see, e.g., Wang's Abstract). There is no mention of any method for measuring clock skew, as claimed by Applicant.

Furthermore, Claim 19 also recites first and third

destination branches, and first, second and third logic blocks. The Examiner has not alleged any teaching in Wang corresponding to such further elements, and Applicant can find no such correspondence. Since Wang does not teach or even suggest any of these claimed limitations, it would be impossible for Wang to disclose the invention as claimed by Applicant. For example, the step of programming the programmable logic device to include a first ring oscillator in which the first destination branch is connected to the input terminal of the first logic block and the output terminal of the first logic block is connected to the input terminal of the second logic block is not taught by Wang since there is no first ring oscillator, no first destination branch, and no first and second logic blocks disclosed anywhere in Wang. Similarly, the step of programming the programmable logic device to include a second ring oscillator in which the third destination branch is connected to the input terminal of the third logic block and the output terminal of the third logic block is connected to the input terminal of the second logic block is not taught by Wang, since there is no second ring oscillator, no third destination branch, and no second and third logic blocks disclosed in Wang.

Therefore, Applicant believes that Claim 19 is allowable over the present rejection and respectfully requests the Examiner's reconsideration and withdrawal thereof. If the rejection is to be maintained, Applicant respectfully requests clarification of how Wang is being read, and more specifically, how the cited portions of Wang correspond to the limitations of Applicant's claims. Otherwise, Applicant requests that the rejection be withdrawn.

In addition, Applicant has amended Claim 19 to point out more particularly and claim more distinctly the subject matter Applicant regards as his invention. Specifically, Applicant has added: "after programming the programmable logic device to include the first ring oscillator" to the step of programming the programmable logic device to include a second ring oscillator. The amendment is fully supported by the

specification as filed, for example by paragraph [0023], and therefore no new matter has been introduced by the amendment. Wang does not disclose or suggest programming a programmable logic device to include a second ring oscillator after programming the programmable logic device to include a first ring oscillator. Therefore, this amendment further distinguishes over Wang.

Each of Claims 20-26 depends, either directly or indirectly, from Claim 19, and thus includes all of the limitations of Claim 19. Therefore, for at least the reasons presented above with respect to Claim 19, Applicant believes Claims 20-26 are also allowable and respectfully request allowance of such claims.

Objections

Claim 7 is objected to as being dependent from a rejected base claim, but indicated as allowable if rewritten in independent form. Applicant thanks the Examiner for this acknowledgement of allowable subject matter. Applicant has rewritten Claim 7 in independent form including all of the limitations of the base and intervening claims. Therefore, Applicant believes Claim 7 is in condition for allowance and respectfully requests allowance of Claim 7.

Request for Withdrawal of Finality

If an action other than allowance of the pending claims is to be made, Applicant requests that the finality of the present Office Action be withdrawn so that the Examiner can consider Applicant's remarks.

Applicant submits the outstanding Office Action is not in compliance with 37 CFR 1.104(c)(2), which states:

When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

The pertinence of Honda should be explained since the Examiner has not identified, in either the present Office Action or any previous Office Action, any particular portion of Honda that corresponds to Applicant's claim elements. As noted above, the Examiner has not identified any portion of Honda that corresponds to the claimed steps of instantiating a first delay element on the device using a first programming sequence, and instantiating a second delay element on the device using a second programming sequence. Furthermore, the Examiner has not identified any portion of Honda that corresponds to the claimed steps of connecting the output terminal of the first logic block to the input terminal of the second logic block, and connecting the output terminal of the third logic block to the input terminal of the second logic block. Applicant respectfully submits that, in fact, such identifications cannot successfully be made. Therefore, the absence of such identifications renders it necessary to explain the pertinence of the Honda reference.

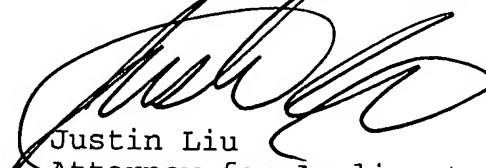
Similarly, the pertinence of Wang should be explained since the Examiner has not identified, in either the present Office Action or any previous Office Action, any particular portion of Wang that corresponds to Applicant's claim elements. As noted above, the Examiner has not identified any portion of Wang that corresponds to the claimed first and second ring oscillators, first and third destination branches, and first, second and third logic blocks. Applicant respectfully submits that, in fact, such identifications cannot successfully be made. The present Office Action merely points generally to figures 2 and 3, and Col. 7, lines 1-5 of Wang in alleging anticipation, and does not explain how the Examiner is reading the cited portions of the reference. Therefore, the absence of such explanation renders it necessary to explain the pertinence of the Wang reference.

Therefore, Applicant hereby requests a new non-final action if the pending claims are not allowed.

Conclusion

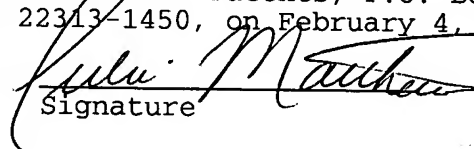
Applicant requests that the Examiner reconsider the final rejection and consider the above arguments. These arguments are believed to indicate that the application including Claims 1-9 and 19-26 should be allowed. Therefore, Applicant requests allowance of the application. If action other than allowance is contemplated, the Examiner is invited to telephone Applicant's attorney at 408-879-4641.

Respectfully submitted,


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I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450, on February 4, 2004.

Julie Matthews
Name


Signature